

4.2.E. 0604000505 (Big Sandy River).

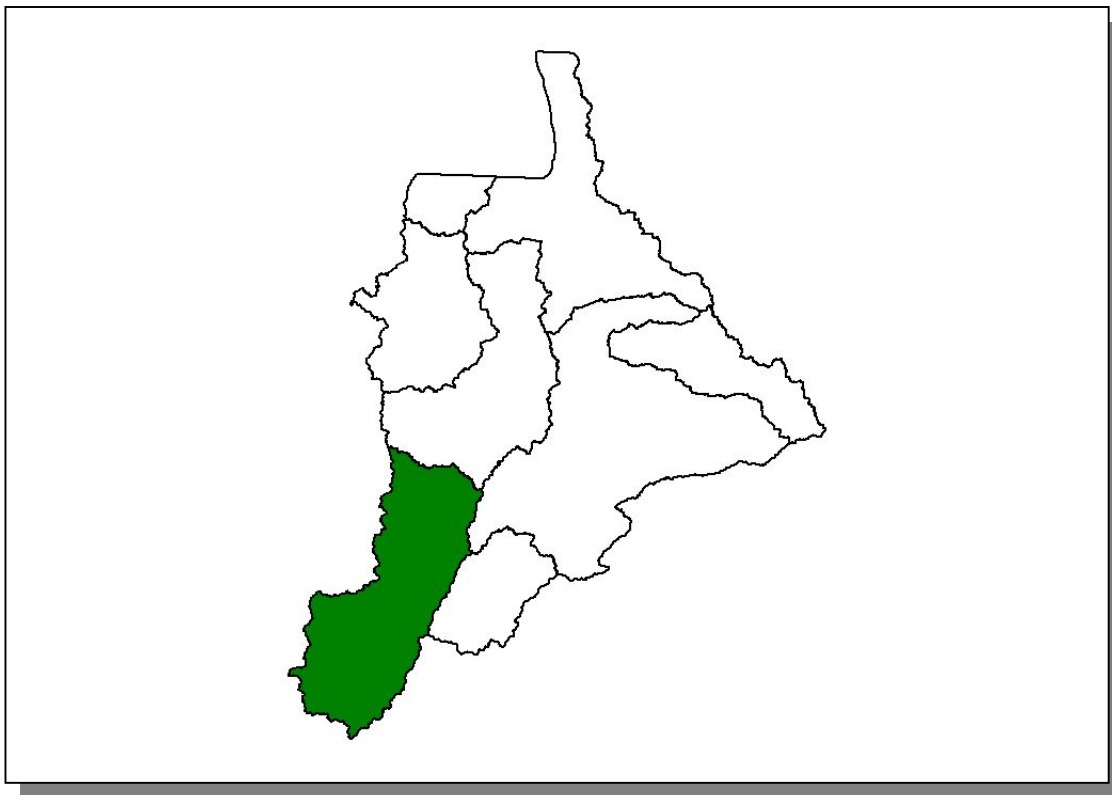


Figure 4-39. Location of Subwatershed 0604000505. All Tennessee Western Valley (KY Lake) HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.E.i. General Description.

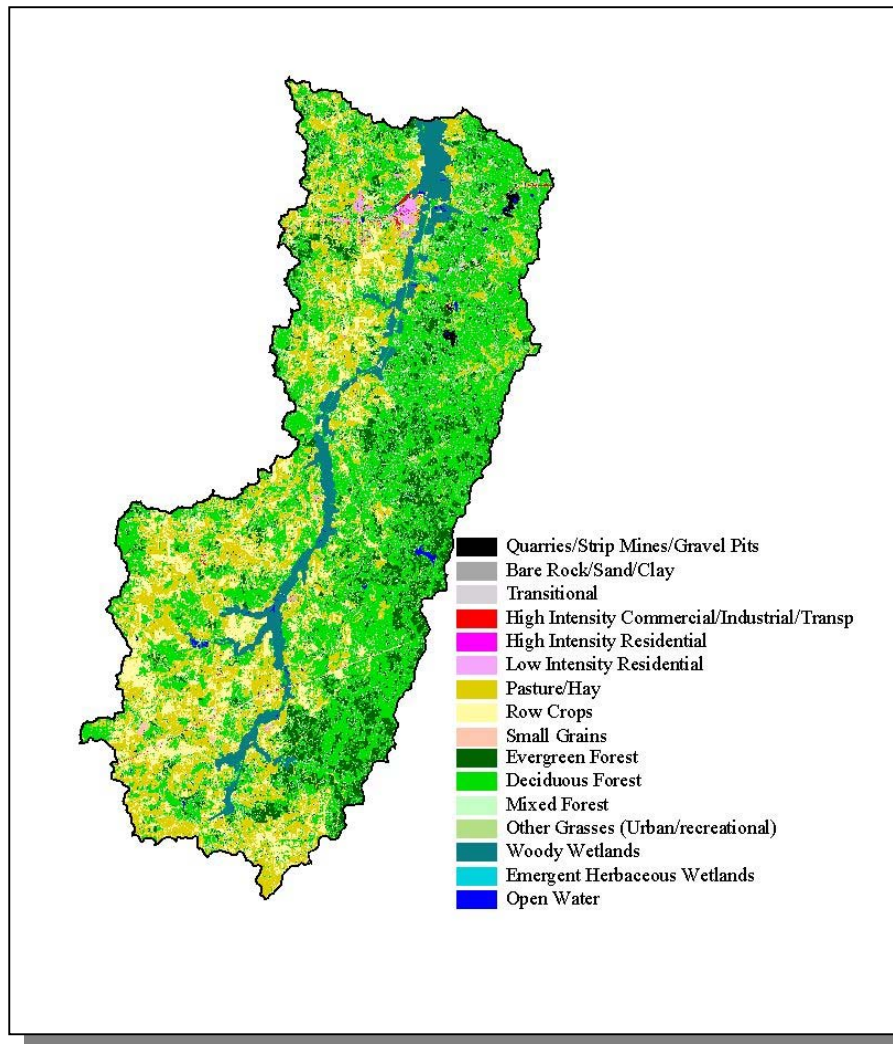


Figure 4-40. Illustration of Land Use Distribution in Subwatershed 0604000505.

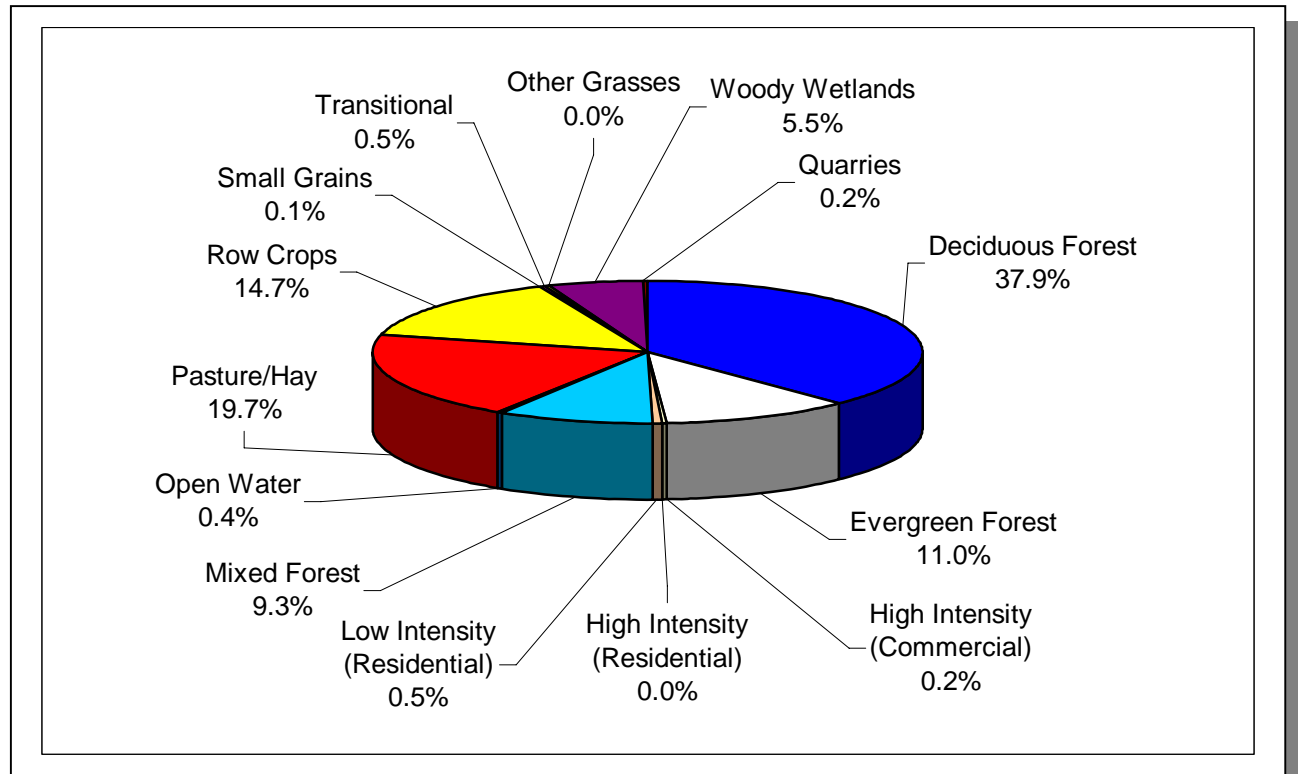


Figure 4-41. Land Use Distribution in Subwatershed 0604000505. More information is provided in Appendix IV.

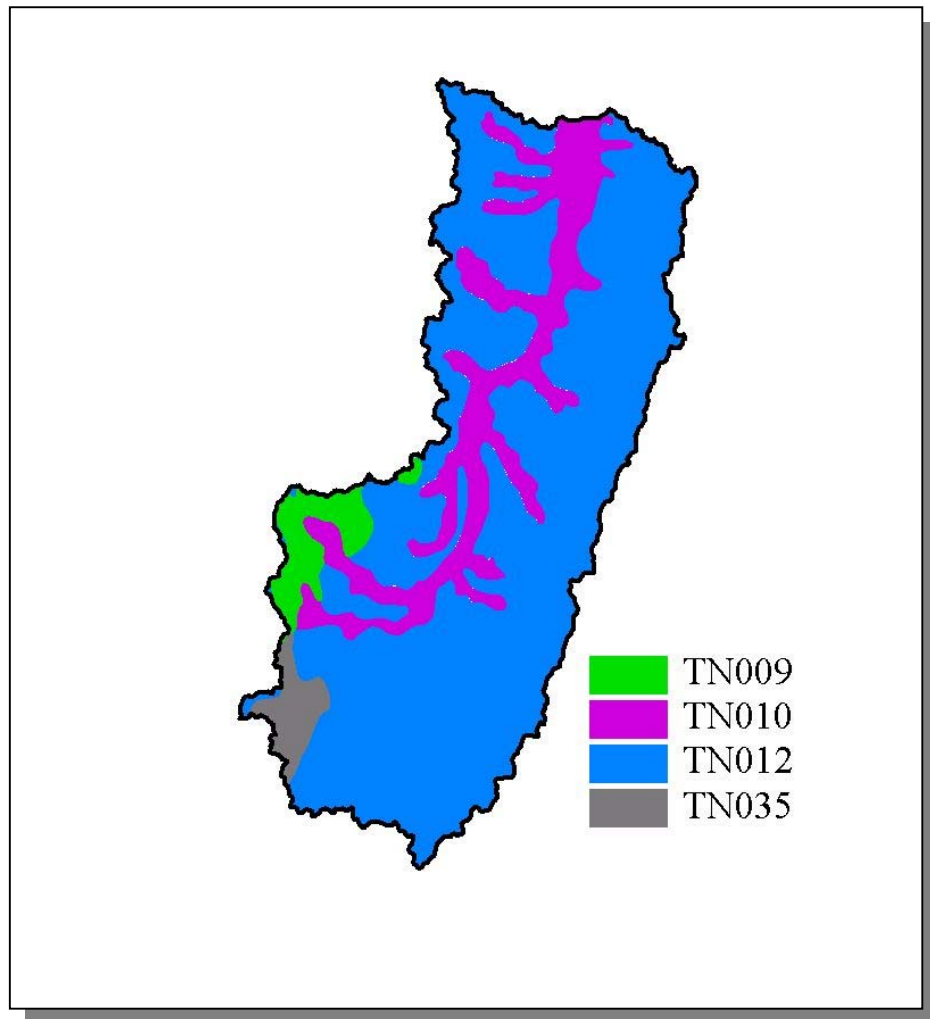


Figure 4-42. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0604000505.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hr)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN009	14.00	C	1.30	5.10	Silty Loam	0.43
TN010	243.00	C	1.33	5.11	Silty Loam	0.44
TN012	3.00	C	2.52	5.13	Silty Loam	0.39
TN035	32.00	C	1.46	4.97	Silty Loam	0.40

Table 4-25. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0604000505. More information is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-1997)
	1990	1997	2000		1990	1997	2000	
Benton	14,524	16,243	16,537	6.17	896	1,002	1,020	13.8
Carroll	27,514	28,990	29,475	24.27	6,678	7,036	7,154	7.1
Henderson	21,844	24,000	25,522	13.83	3,020	3,318	3,529	16.9
Totals	63,882	69,233	71,534		10,594	11,356	11,703	10.5

Table 4-26. Population Estimates in Subwatershed 0604000505.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Bruceton	Carroll	1,586	699	668	31	0
Clarksburg	Carroll	307	138	20	114	4
Hollow Rock	Carroll	902	397	48	339	10
Parker's Crossroads	Henderson	167	82	0	82	0
Totals		2,952	1,316	736	566	14

Table 4-27. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 0604000505.

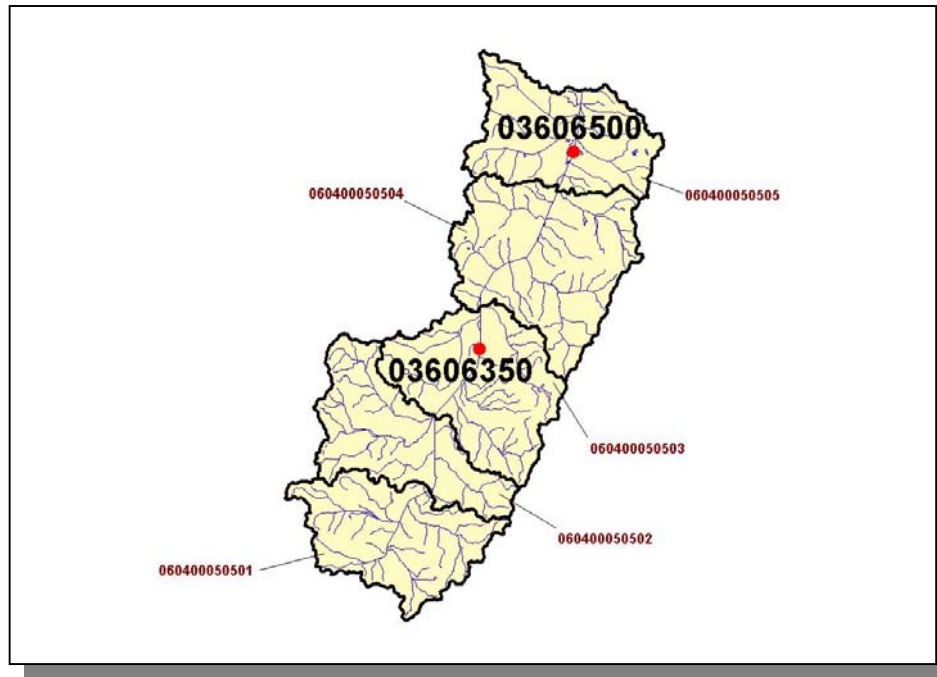


Figure 4-43. Location of Historical Streamflow Data Collection Sites in Subwatershed 0604000505. Subwatershed 060400050501, 060400050502, 060400050503, 060400050504 and 060400050405 boundaries are shown for reference. More information is provided in Appendix IV.

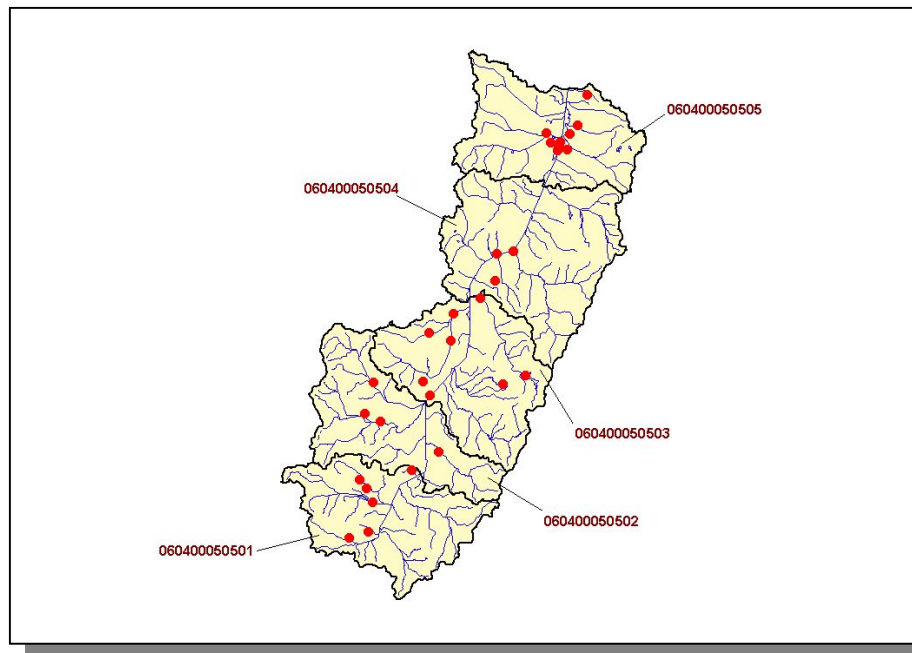


Figure 4-44. Location of STORET Monitoring Sites in Subwatershed 0604000505. Subwatershed 060400050501, 060400050502, 060400050503, 060400050504 and 060400050405 boundaries are shown for reference. More information, including site names and locations, is provided in Appendix IV.

4.2.E.ii. Point Source Contributions.

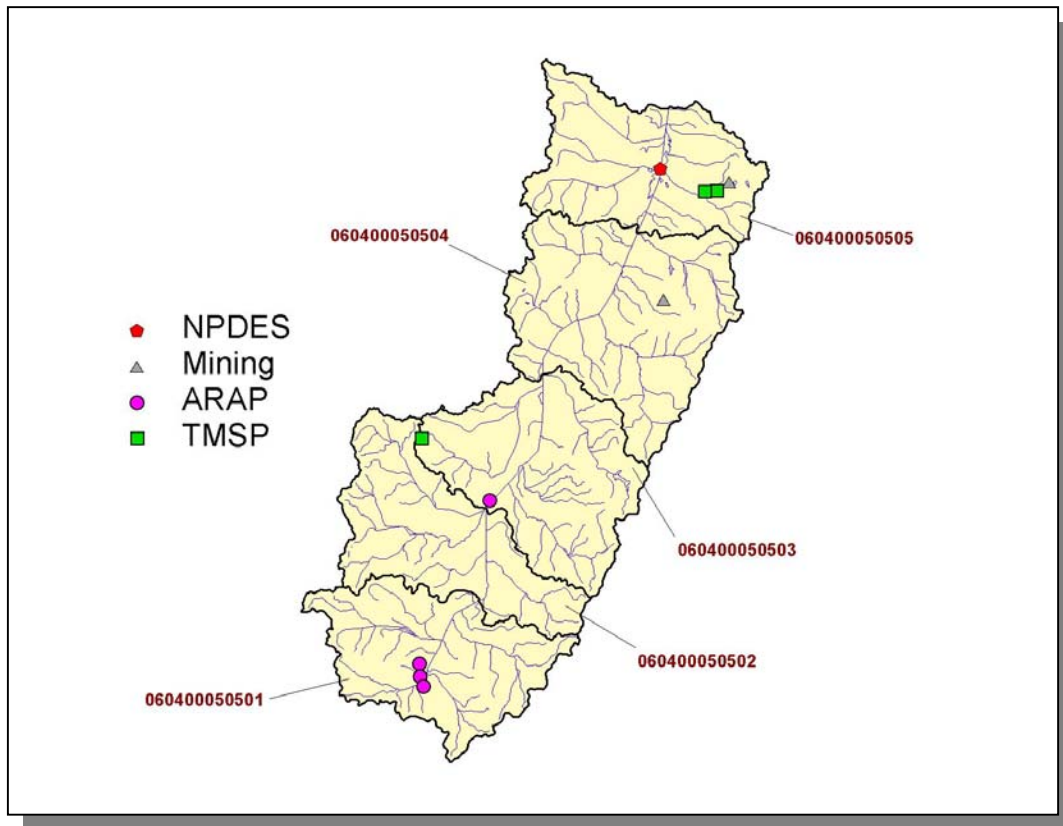


Figure 4-45. Location of Active Point Source Facilities in Subwatershed 0604000505. Subwatershed 060400050501, 060400050502, 060400050503, 060400050504, and 060400050505 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

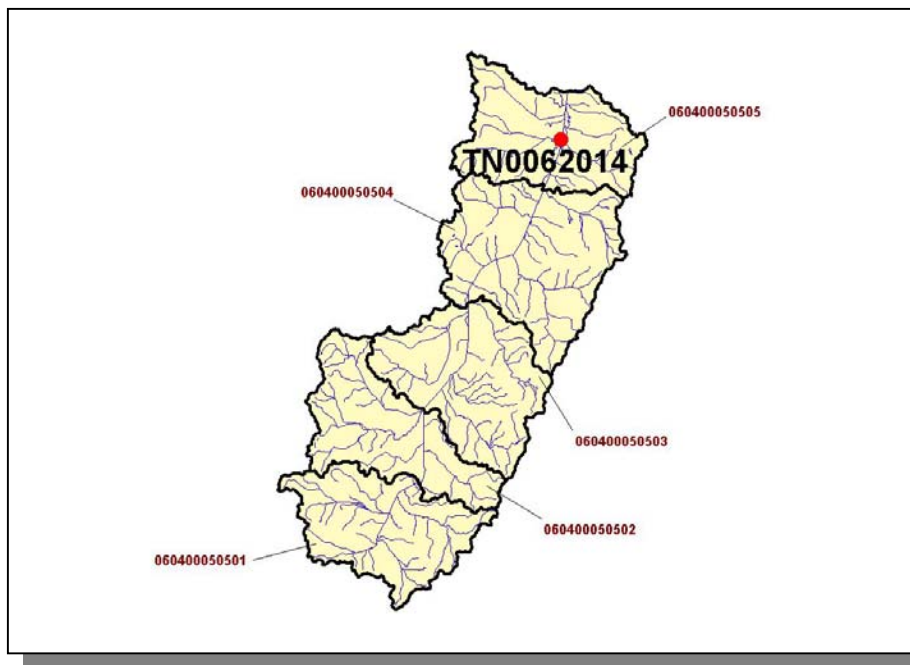


Figure 4-46. Location of NPDES Facilities in Subwatershed 0604000505. Subwatershed 060400050501, 060400050502, 060400050503, 060400050504, and 060400050505 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

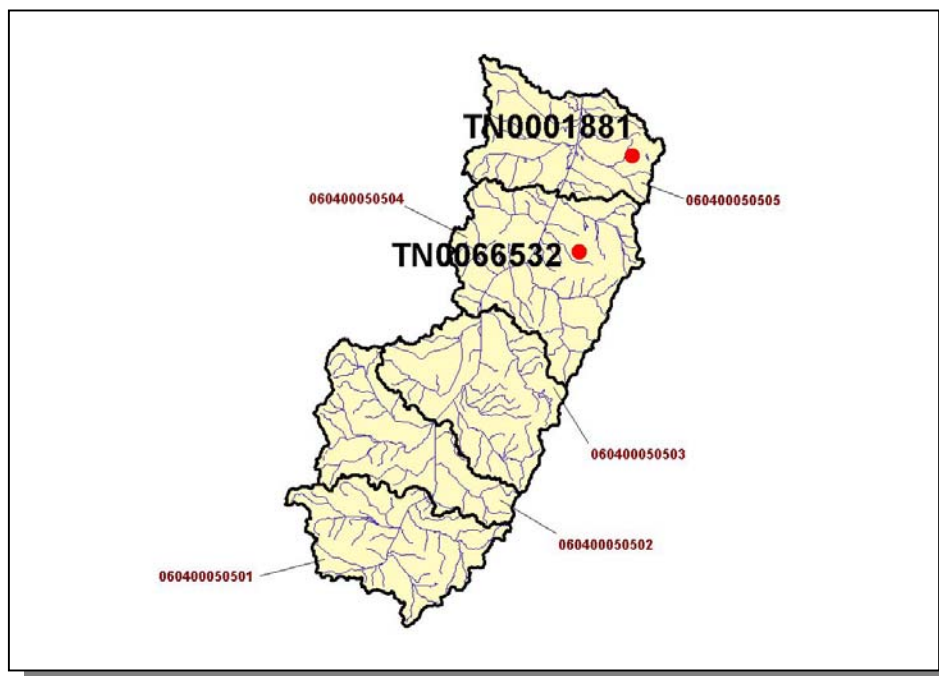


Figure 4-47. Location of Active Mining Facilities in Subwatershed 0604000505. Subwatershed 060400050501, 060400050502, 060400050503, 060400050504, and 060400050505 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

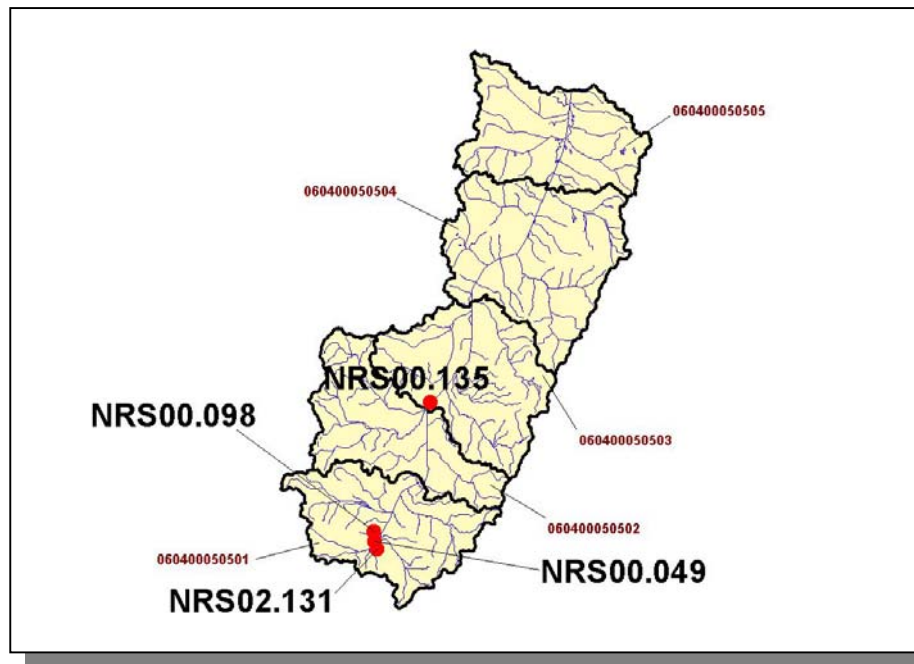


Figure 4-48. Location of ARAP Sites (Individual Permits) in Subwatershed 0604000505. Subwatershed 060400050501, 060400050502, 060400050503, 060400050504, and 060400050505 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

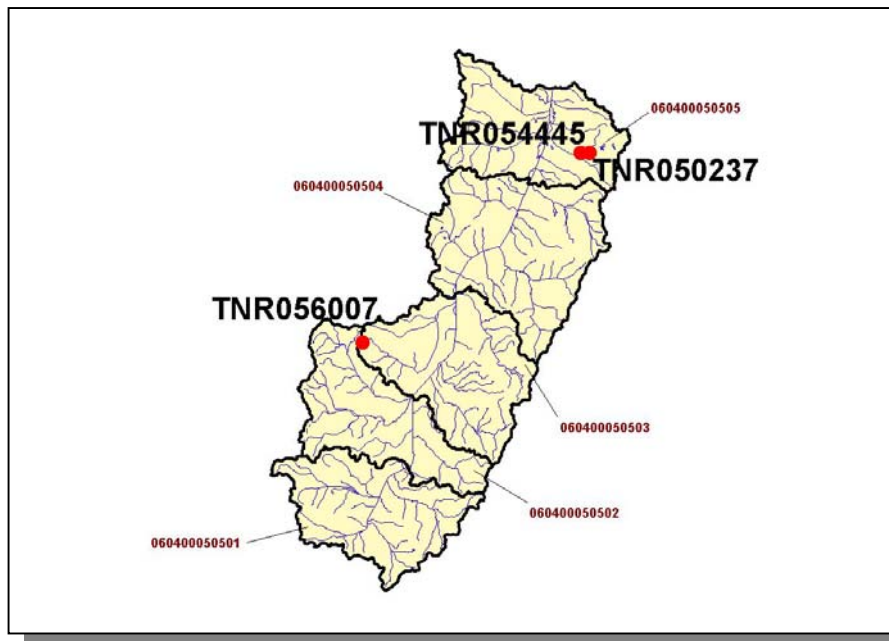


Figure 4-49. Location of TMSP Facilities in Subwatershed 0604000505. Subwatershed 060400050501, 060400050502, 060400050503, 060400050504, and 060400050505 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

4.2.E.ii.a. Dischargers to Water Bodies Listed on the 2002 303(d) List

There is one NPDES facility discharging to water bodies listed on the 2002 303(d) list in Subwatershed 0604000505:

- TN0062014 (Bruceton Wastewater Lagoon) discharges to Big Sandy River @ RM 31.0

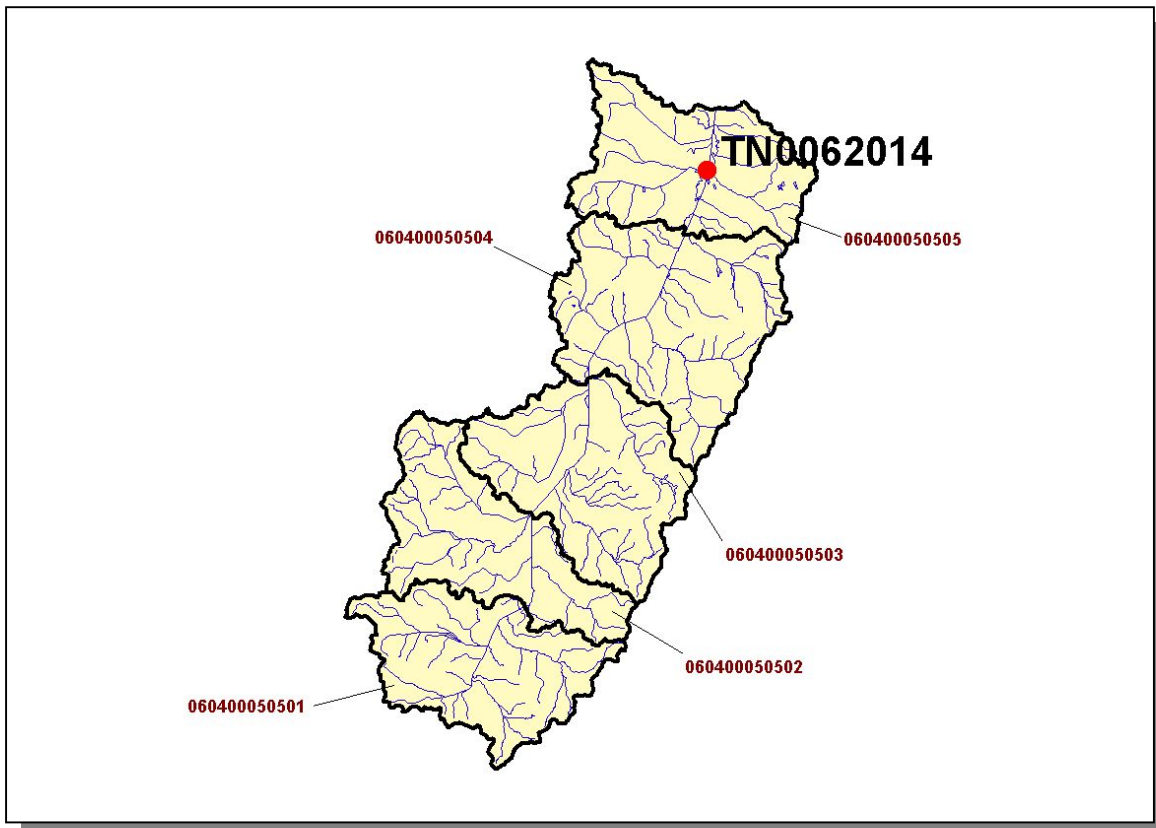


Figure 4-50. Location of NPDES Dischargers to Water Bodies Listed on the 2002 303(d) List in Subwatershed 0604000505. Subwatershed 0604000501, 0604000502, 0604000503, 0604000504, and 0604000505 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0062014	4.28	4.44	4.68	3.94	0.572

Table 4-28. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0604000505. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT #	WET	CBOD ₅	FECAL COLIFORM	E. COLI	TRC	TSS	SETTLEABLE SOLIDS	DO	pH
TN0062014	X	X	X	X	X	X	X	X	X

Table 4-29. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0604000505. WET, Whole Effluent Toxicity; CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.E.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Milk Cow	Cattle	Chickens (Layers)	Chickens Sold	Hogs	Sheep
7,313	109	15,096	16	<5	4,932	56

Table 4-30. Summary of Livestock Count Estimates in Subwatershed 0604000505. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Benton	172.7	172.7	2.1	6.9
Carroll	169.1	169.1	0.6	2.0
Henderson	158.5	158.5	3.6	12.8
Totals	500.3	500.3	6.3	21.7

Table 4-31. Forest Acreage and Annual Removal Rates (1987-1994) in Subwatershed 0604000505.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.52
Grass (Hayland)	0.16
Legumes (Hayland)	0.15
Legumes, Grass (Hayland)	0.42
Grass, Forbs, Legumes (Mixed Pasture)	0.80
Forest Land (Not Grazed)	0.00
Forest Land (Grazed)	0.00
Corn (Row Crops)	6.05
Cotton (Row Crops)	6.82
Soybeans (Row Crops)	8.29
Wheat (Close Grown Cropland)	18.50
Other Cropland not Planted	7.73
Conservation Reserve Program Lands	0.87
Other Land in Farms	0.59
Nonagricultural Land Use	0.00
Farmsteads and Ranch Headquarters	0.85

Table 4-32. Annual Estimated Soil Loss in Subwatershed 0604000505.